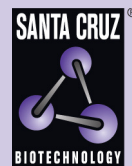


p300 (N-15): sc-584



The Power to Question

BACKGROUND

Cyclic AMP-regulated gene expression frequently involves a DNA element designated the cAMP-regulated enhancer (CRE). Many transcription factors, including the protein CREB, which is activated as a result of phosphorylation by protein kinase A, bind to this element. It has been shown that protein kinase A-mediated CREB phosphorylation results in its binding to a nuclear protein designated CBP (for CREB-binding protein). These findings suggest that CBP has many of the properties expected of a CREB co-activator. Another high molecular weight transcriptional adapter protein, designated p300, is characterized by three cysteine- and histidine-rich regions, of which the most carboxy terminal region specifically binds the adenovirus E1A protein. p300 molecules lacking an intact E1A binding site bypass E1A repression even in the presence of high concentrations of E1A. Sequence analysis of CBP and p300 has revealed substantial homology, arguing that these proteins are members of a conserved family of co-activators.

CHROMOSOMAL LOCATION

Genetic locus: EP300 (human) mapping to 22q13.2; Ep300 (mouse) mapping to 15 E1.

SOURCE

p300 (N-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of p300 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-584 X, 100 µg/0.1 ml.

p300 (N-15) is available conjugated to agarose (sc-584 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to either fluorescein (sc-584 FITC, 200 µg/ml), Alexa Fluor® 488 (sc-584 AF488, 200 µg/ml) or Alexa Fluor® 647 (sc-584 AF647, 200 µg/ml), for IF, IHC(P) and FCM.

In addition, p300 (N-15) is available conjugated to either TRITC (sc-584 TRITC, 200 µg/ml) or Alexa Fluor® 405 (sc-584 AF405), 100 µg/2 ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-584 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

p300 (N-15) is recommended for detection of p300 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p300 (N-15) is also recommended for detection of p300 in additional species, including equine, canine, porcine and avian.

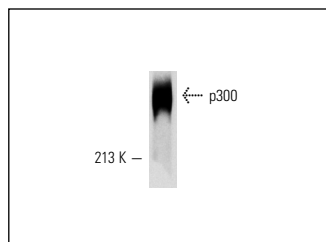
Suitable for use as control antibody for p300 siRNA (h): sc-29431, p300 siRNA (m): sc-29432, p300 shRNA Plasmid (h): sc-29431-SH, p300 shRNA Plasmid (m): sc-29432-SH, p300 shRNA (h) Lentiviral Particles: sc-29431-V and p300 shRNA (m) Lentiviral Particles: sc-29432-V.

p300 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

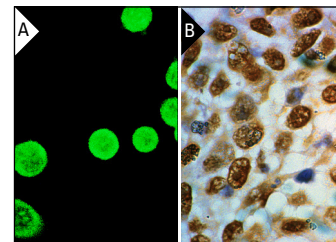
Molecular Weight of p300: 300 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132, KNRK nuclear extract: sc-2141.

DATA



p300 (N-15): sc-584. Western blot analysis of p300 expression in A-431 nuclear extract.



p300 (N-15): sc-584. Immunofluorescence staining of methanol-fixed SK-BR-3 cells showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing nuclear localization (B).

SELECT PRODUCT CITATIONS

- Xiao, H., et al. 2000. p300 collaborates with Sp1 and Sp3 in p21^{waf1/cip1} promoter activation induced by histone deacetylase inhibitor. *J. Biol. Chem.* 275: 1371-1376.
- Bai, L. and Merchant, J.L. 2000. Transcription factor ZBP-89 cooperates with histone acetyltransferase p300 during butyrate activation of p21^{waf1} transcription in human cells. *J. Biol. Chem.* 275: 30725-30733.



Try **p300 (F-4): sc-48343** or **p300 (NM11): sc-32244**, our highly recommended monoclonal alternatives to p300 (N-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **p300 (F-4): sc-48343**.